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OFFICE, CHIEF OF ARMY FIELD FORCES
Fort Monroe, Virginia

ATTNG-26 350.05/4(DOCI)(C)(7 Apr 53) 7 April 1953

SUBJECT: Dissemination of ~~Combat Information~~

TO: See Distribution

1. In accordance with SR 525-85-5, Processing of Combat Information, the inclosed EXTRACTS are forwarded for evaluation and necessary action. It may be appropriate, in certain cases, to take action upon a single extracted item; in others, it may be desirable to develop a cross-section of accumulated extracts on a particular subject before initiating action; and often, the extracted item serves to reaffirm our doctrines and techniques.

2. Copies are furnished to other military agencies to keep them informed concerning theater problems from the front line through the logistical command.

3. These EXTRACTS are derived from reports which are classified SECRET. For the greater convenience of the user, this Office assigns each extracted item the lowest classification compatible with security. No effort is made to paraphrase or delete any portion of the extracted remarks, so that none of the original intent is lost.

4. Combat information EXTRACTS which are applicable to training at the company-battery level appear in Army Field Forces TRAINING BULLETINS.

FOR THE CHIEF OF ARMY FIELD FORCES:

A B Chatham

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Lt Col, AGC
Asst Adjutant General

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SOURCE: Command Report - 2d Inf Div

DATE: November 1952 Source No 684

(RESTRICTED)

COLD WEATHER EXPEDIENTS. - This division has been conducting experiments using different field expedients to further protect the soldier during the winter months and thereby increase his combat efficiency.

The problem of heating bunkers on the MLR and OPLR has been solved by the use of the following equipment:

1. Yukon stoves.

2. Improvised stoves manufactured by the division Ordnance.

3. Charcoal burners for standing guards; also used with half track vehicles.

Personnel on patrols have presented the biggest problem. Admittedly the clothing and boots give very good protection; however, continued exposure to the elements reduce the man's efficiency no matter how well he is dressed.

Several experiments have been conducted using pads, heat, chemical, stock number 864-635, issued by the Medical Corps. These experiments have been highly successful and troop reaction has been of acclaim. The type of experiments included: ambush patrols, combat patrols, tank crews and standing guards.

Under most conditions four pads were required per man; two for the body trunk and two for the thigh.

This division has a requirement for 50,000 pads, heat, chemical.

(RESTRICTED)

RUBBER INSULATED COLD WEATHER BOOT. - During the reporting period the Medical officer observed numerous minor foot ailments during the first week of constant daily use of the rubber insulated cold weather boot.

AWC LOG #

INCLOSURE

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Recommend that in subsequent winter seasons men be instructed to wear these boots for a period of only one or two hours daily for the first week of use. This practice would accustom the feet to the boot and would diminish the number of cases of scalding, arch relaxation, and minor cold injury which results from a sudden transition to an unfamiliar type of footgear.

SOURCE: Command Report - 765th Trans Railway Shop Bn

DATE: November 1952 Source No 685

(RESTRICTED)

PATROLLING SCOUT CAR ON RAILS. - As guerrilla activity has increased and caused a hazard to rail operations in Korea, plans were drawn for an armored rail vehicle which would act as a patrolling scout car. This armored vehicle will travel the supply lines of Korea as an independent train to insure the safety of supply and hospital trains.

Carrier, general, armored half-track, M1A3, was the vehicle chosen to be converted for rail operation. The first process was the removal of the tread after which a set of trailing trucks was placed under the bed of the half-track. The front wheels were fabricated by applying box car tires to the original half-track wheel drums. The tires were offset at the proper track width and welded to the drums.

During inclement weather, starting and stopping of rail vehicles is hindered through loss of traction due to wet tracks. To provide the necessary traction in adverse weather conditions, sanders were applied to the front of the vehicle.

The vehicle will be armed and will be operated by a crew of MP's of the 722d Military Police Battalion.

SOURCE: Command Report - 40th Inf Div

DATE: August 1952 Source No 686

(RESTRICTED)

WARRANT OFFICER AS ASSISTANT G2. - Based on the tremendous administrative work load placed on the G2 Section in the type of combat

experienced in Korea, recommend that authorization for a Warrant Officer administrator be given due consideration. The present T/O should be changed as follows:

The present authorized assistant G2 be incorporated into a position of assistant G2 operations with the rank of Major, an additional 1st Lieutenant be authorized as assistant operations officer, and the Warrant Officer administrator be considered the section chief for all administrative duties. This would relieve the G2 and assistant G2 of constantly dealing with outright administrative problems, and allow them to concentrate their time and effort on the intelligence functions of the division.

SOURCE: Command Report - 17th Inf Regt

DATE: November 1952 Source No 687

(CONFIDENTIAL)

POW CAMP PROBLEMS. - PW's operate clandestine military-political organizations to teach communist propaganda, encourage noncommunist PW's to join organizations sponsoring communism, harass the detaining power, and cause incidents which could be embarrassing to the United Nations. In addition the PW organizations attempt to identify units and personnel, by name, who are guarding the compounds.

The PW groups are ingenious in methods used to accomplish their mission. Stamps have been confiscated which are made from the rubber cut from the soles of shoes; these stamps are used along with some type of crude mimeograph device to print leaflets and messages. The theme of the leaflets, which are addressed to UN troops, is disaffection and dissension.

Constant effort is maintained by PW organizations to encourage all prisoners to remain faithful to North Korea and to resist voluntary repatriation. Toward this end, the military-political organizations work ceaselessly. Communication is a big factor in their purpose and the PW's use many methods to communicate between compounds. Rocks with notes attached are thrown into adjacent compounds; PW's working at supply points send messages to various compounds; tobacco is removed from cigarettes, notes slipped inside, and the cigarettes passed to PW's from different inclosures or compounds. One of the best methods prisoners have of disseminating information is through the hospital. Before a PW goes to the hospital he is briefed, information is exchanged between patients in the hospital, and is thus disseminated to other compounds.

Over

SOURCE: Command Report - Eighth Army

DATE: August 1952 Source No 688

(RESTRICTED)

TRAINING OF ENGINEERS IN ROCK AND EARTH REMOVAL. - The majority of engineer troops in this command received demolition training in the CONUS with almost 100 per cent emphasis on combat demolitions, destruction of bridges and roads, removal of obstacles by demolition, and similar engineer tasks, with little or no emphasis on excavation of earth and on use of demolitions in quarrying and similar rock removal operations. On the other hand, approximately 90 per cent of demolition work of engineer units in Korea has been rock and earth removal, which requires a combination of knowledge of earth characteristics, drilling, and drill equipment, and the use of proper explosives in such operations. Engineer replacements received are also deficient in knowledge of bore holes and the value of dynamite as an excavation explosive.

Recommend that engineer training in the CONUS contain additional instruction on rock and earth removal, use of bore holes, and the value of dynamite as an excavation explosive.

SOURCE: Command Report - 171st FA Bn

DATE: October 1952 Source No 689

(RESTRICTED)

COUNTERFIRE EXPEDITING. - A total of fifty counterfire fixes were made. During the period the infantry counterfire plotter was located in the direct support artillery battalion FDC. A direct wire was laid from the plotter's position to each of the counterfire teams. When a fix was made the report came directly to the plotter, thereby enabling the direct support artillery battalion to bring immediate fire on the fix. While fire is being brought on the target the routine reporting of the counterfire information is made to the infantry regimental command post and to divison artillery FDC. An alternate means of communication is provided for the counterfire teams in that, when their own direct line fails, they can use the artillery observer's line. Since the time element is of paramount importance in delivering effective countermortar fire, this system is superior to the usual method.

(RESTRICTED)

LIFE OF BATTERIES BA39 AND BA40. - Batteries BA39 and BA40 received during the past month have been very poor. The operational life of these batteries was short and lacked the performance expected of new BA39 and BA40, batteries. The life of these batteries was so varied, that an average operational period could not be obtained.

SOURCE: Command Report - Eighth Army

DATE: July 1952 Source No 690

(RESTRICTED)

ARTILLERY ATTACK OF STORM-WEAKENED BUNKERS. - Normally, infantry-occupied bunkers do not represent profitable artillery targets since their destruction requires the expenditure of an excessive amount of ammunition, and the enemy quickly rebuilds his fortifications. However, after heavy rainstorms, bunkers are weakened to an extent that they can be collapsed by the blast effect of a shell bursting nearby. With relatively light expenditure of ammunition, serious damage can be done to enemy positions under such conditions. Excellent results were obtained by artillery fires on enemy bunkers following the severe storms of the rainy season this year.

(RESTRICTED)

NAPALM HANDLING. - Modified caps for the 5-gallon napalm drums used as thickened fuel transport containers, provide valuable additional flexibility in transferring thickened fuel from centrally located mixing stations to flame throwers in the field. The valve for pressurizing the can is connected to a source of compressed air, the filled transfer can is inverted over the flame thrower to be filled, compressed air is admitted and forces the fuel from the transfer can to the flame thrower. The Compressor, Air, Lightweight, E3R2 (or M3), can fuel and pressurize simultaneously two portable flame throwers every ten minutes using this cap. This is accomplished by the simple addition of a pressure-reducing valve and a double yoke of outlet hose to the third outlet of the compressor. An ordinary tire pump can also be used effectively, but is slower.

A technique has been devised to reduce the flow of the M3 mixing unit from 25gpm to 7gpm. This reduced flow increases the handling efficiency of thickened fuel mixed with the M3 unit where fuel storage is accomplished in 5-gallon gasoline cans. The present local method of using the M3 unit to handle naplam is to fill a 55-gallon drum with partially thickened fuel, then

Over

force (under 30-40 pounds pressure) the almost thickened fuel into 5-gallon cans for storage and handling. A shortcoming of this method is the increased sensitivity to hopper-operator error which produces variations in gel consistancy due to the reduced flow of gasoline with unchanged sensitivity of thickener flow regulation. In addition, operating pressures were not sufficiently high to cause the relief valve to function as a regulator valve. No additional surging or spraying resulted from the incorporation in the unit of the reduced flow device.

(RESTRICTED)

M4 DUST RESPIRATOR EFFECTIVENESS. - The consensus of using personnel is that the M4 respirator is superior to the M1 and is satisfactory in normal weather conditions and if worn for short periods of time. It is considered unsatisfactory in extreme heat and high humidity because of the heat generated in the mask and the resultant moisture condensation forming on the glasses impairing the driver's vision. After prolonged use the respirators become less effective due to the accumulation of dust in the filters. Such a condition causes labored breathing, thereby increasing driver fatigue. Prolonged wear also may cause a skin rash to develop due to the constant rubbing of the mask against the face.

Indications are that the M4 dust respirator should not be considered as an ultimate end item, but as an interim item satisfactory for short periods of wear. Recommend a dust respirator be developed which is lighter, less resistant to breathing and so designed as to minimize or obviate chaffing of the skin.

SOURCE: Command Report - I Corps Arty

DATE: October 1952 Source No 691

(SECRET)

NEED FOR ADDITIONAL HEAVY ARTILLERY. - In this corps only one weapon is capable of destroying the enemy artillery. The 8-inch howitzer has proven time and again that it can destroy anything within its range with a minimum number of rounds. The 155-mm gun with its long range is excellent for harassing and interdiction fire; however, it is not very effective in destroying enemy artillery due to dispersion and weight of projectile. The same is true for the 155-mm howitzer which does not have the punch necessary to neutralize or destroy enemy artillery. In the present

situation the enemy has his artillery in bunkers and caves, which can be destroyed only by heavy artillery or by a direct hit with medium artillery. The 8-inch howitzer with its extreme accuracy and the 240-mm howitzer with its comparable accuracy are considered ideal for this job. The minimum requirement is one additional 8-inch howitzer battalion and one 240-mm howitzer battalion attached to each corps in the Army.

(RESTRICTED)

AWARDS AND DECORATIONS. - Awards and decorations to deserving personnel are foremost in the mind of every commander in this theater. It is the commander's responsibility to show his and the Army's appreciation for a job well done. However, there is one medal that commanders in this theater rarely award. This is the Good Conduct Medal. Army Regulation 600-65, 12 December 1951, with change 1, January 1952, states that an enlisted man must have exhibited "exemplary behavior, efficiency, and fidelity in an enlisted status for a period of three continuous years" to be eligible for this medal. Under this regulation, not one of the present group of draftees serving in Korea is eligible for this award. Many deserving enlisted men from this theater return to the United States without being rewarded for their excellent service while in Korea. For service which does not meet the criteria established for the Bronze Star or the Commendation Ribbon with Metal Pendant, the Good Conduct Medal would be a deserving award.

Recommend that regulations be changed to allow the Good Conduct Medal to be awarded after one year of continuous service, if the enlisted man has served in the Korean Combat Theater for a period of six months or more. In World War II the criteria was one year of continuous service regardless of where the enlisted man served.

(CONFIDENTIAL)

ENEMY ARTILLERY. - In the Commonwealth Division sector, the identification of an armor-piercing 122-mm projectile was made. This is the first known instance of this type shell being used on the I Corps front. This projectile weighs fifty-five pounds and is solid, apart from a small charge of four and eight-tenths pounds of TNT in the base. It is normally fired from a corps gun, SP gun, or a tank, all of which have muzzle velocities of approximately two thousand six hundred feet per second.

SOURCE: Command Report - 64th Tank Bn

DATE: October 1952 Source No 692

(RESTRICTED)

TANK ESCAPE HATCHES. - Prior to the issue of escape hatches which had been modified with a reinforced lip, personnel of this battalion were injured when their tanks struck mines, as a result of the escape hatch being forced upward by the explosion into the driver's or assistant driver's compartment. Since the modified escape hatches were issued to this organization in April several tanks have struck mines, but on no occasion has an escape hatch been forced upward into the tank.

(RESTRICTED)

SELF-PROTECTION FOR TANKERS. - Men must be trained to stay inside the tank unless their presence is required outside. The crewmen have a tendency to stand on the rear deck, or on the ground when the tank is stopped for any length of time, and when artillery or mortar fire is not falling. Naturally, this invites enemy fire and increases the danger of personnel casualties from mines.

(CONFIDENTIAL)

DISTANCE FROM TANK UNIT TO SUPPORTING ORD.. - The mechanical unreliability of the M46 tank demands that the field maintenance (supporting ordnance) unit be located within five miles of the field trains of the tank unit.

SOURCE: Command Report - IX Corps

DATE: July 1952 Source No 693

(RESTRICTED)

SEARCHLIGHT DEMONSTRATION IN 73D TANK BATTALION. - The demonstration consisted of a live fire problem by the tank 90-mm gun at a target illuminated by tank-mounted searchlights. Worthy of note was the extreme accuracy of tank fires at night when such searchlights are employed.

(RESTRICTED)

CONTAINERS FOR TRANSPORTING ICE CREAM. - A number of fabric, insulated, containers which were originally designed to prevent water in 5-gallon cans from freezing were issued to division and corps units for the purpose of transporting ice cream from source to user. These containers proved to be highly satisfactory for the purpose, as they were able to hold ice cream in an edible condition from three to seven hours depending upon the condition of the ice cream when placed in the container, temperature, and care exercised in handling. The containers will hold two 2-1/2-gallon cans of ice cream. They are rugged and durable but unless extreme care is exercised in cleaning, they will become unsanitary in a short period of time.

SOURCE: Command Report - 73d Tank Bn

DATE: August 1952 Source No 694

(RESTRICTED)

FIELD EXPEDIENT FOR SALVAGING EMPTY SHELL CASES. - The large number of valuable spent 90-mm shell cases being left at forward firing positions established a requirement for providing each tank with some means of bringing its spent brass back for salvage. A basket to be attached to the left of the turret on the M46 tank was designed to catch spent 90-mm brass as it is tossed from the fighting compartment of the tank either through the pistol port or loader's hatch.

A test was conducted on an M46 tank with basket attached to determine if there was any drag on the movement of the turret. The basket was filled with seventy empty shell cases during this test with the following results:

1. The tank was placed on level ground and the turret traversed manually and with power. There was little to no effect on the movement of the turret in either case. There was no effect on the gunner's ability to lay on a target.

2. The tank was placed on a 45 degree slope and there was a slight drag on the turret while the basket was moving in an uphill direction. Also the turret's movement was speeded up when the basket moved in a downhill direction. The above result applies whether in power or manual traverse; however, it was more apparent when in manual traverse. The drag in the

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turret was not considered great enough to affect the gunner's ability to lay the gun. In an over-all analysis, the basket would have little if any effect on the firing of the 90-mm gun.

The basket was used in a combat operation by Company B, 73d Tank Battalion, forward of the MLR. The particular tank to which the basket was attached, moved approximately 3000 yards forward of the MLR and fired 48 rounds against enemy targets. All spent 90-mm cases were tossed into the basket from the fighting compartment. The use of this basket in no way affected the gunner's ability to accurately lay on targets. The tank received two direct hits, plus other near misses, by artillery and mortar rounds with no damage resulting to the basket. In this action the basket proved its value in another manner. The brass it carried was used under the tracks of another tank which was stuck in a mud hole. This made possible the retrieving of the stuck tank.

The basket weighs slightly over 100 pounds and costs approximately $55.00 for labor and material. It can be placed on or removed from the turret of the tank by two crewmen in ten minutes. This allows the basket to be used when required and left behind when not required with a minimum amount of effort on the part of the crew. It does, however, increase the width of the turret silhouette, front and rear view, by 21 inches. It does not increase the length of the turret silhouette, side view, or height of turret silhouette.

The basket could also be used as a rack for crew baggage and equipment during an administrative march or tactical march when contact with the enemy is not imminent. This would keep the crew compartment and the outside of the turret clear at all times.

(RESTRICTED)

ARMORED VESTS FOR TANK BNS. - Recommend the following personnel of the tank battalion be equipped with the armored vest:

Battalion medical detachment personnel

Battalion maintenance personnel

Company maintenance personnel

Reconnaissance platoon personnel

Two per tank crew

(RESTRICTED)

"BUNKER BUSTING" TACTICS. - During this month, 90 per cent of the battalion missions were of the "bunker busting" nature.

To conserve ammunition and insure maximum effect on targets, the battalion utilized the precision method of adjustment.

In this system, the gunner fires on the target, using his direct fire sights until he is within a few yards of the target. At this point, the gunner sets his azimuth indicator and gunner's aid at zero and levels the bubble in the M1 quadrant. On all subsequent commands, the gunner utilizes his azimuth indicator for deflection changes and converts range changes to mils and applies the mil change to his M1 quadrant. By this method, the gunner is able to adjust his fire so as to move the area of impact right or left, up or down, figured in feet rather than yards. This is often necessary in order to place the shell into the apertures of the bunkers.

SOURCE: Command Report - 2d Log Comd

DATE: July 1952 Source No 695

(RESTRICTED)

M46 OIL COOLERS. - Oil coolers on the M46 tanks still give trouble for which no solution has been found. Tanks are continually being received with the carburetor containing a gummy substance, necessitating the removal and cleaning of each unit before it can operate properly.

SOURCE: Command Report - Signal Svc Bn (VHF), 8189th AU

DATE: October 1952 Source No 696

(RESTRICTED)

TEST EQUIPMENT FOR SIGNAL BATTALION (VHF). - A close study of our operations over the past six months has disclosed the fact that constant use of fixed equipment has resulted in deterioration that cannot be discovered by using test equipment presently authorized the battalion. This applies particularly to coaxial cable, antenna masthead connections and measuring meters found in T-14's, R-19's and all carrier bays. Our operations have been, in some instances, seriously hampered because we were

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forced to assume that coaxial cable and antenna masthead connections were in good order, when in truth, a complete test made with borrowed test equipment disclosed faults that were not discovered when the equipment was checked using test equipment authorized by our T/A. In the case of measuring meters, whole VHF systems were operating below optimum because of incorrect meter indications which could not be discovered using available equipment.

Recommend that the following equipment be included in the T/A of every VHF battalion to insure the optimum performance of vital equipment through proper use of this test equipment:

Test Set I-48B

Test Set I-49

Bird Corporation Model 67 RF Wattmeter

Output meter TS-585/U

RF Wattmeter ME-11-U

Signal Generator TS-497-A/URR

Signal Generator AN/URM/27

Substitute Tube Tester TV-2 or TV-3 for Tube Tester I-177.

SOURCE: Command Report - X Corps

DATE: July 1952 Source No 697

(RESTRICTED)

BARREL COATING ON M30 4.2-INCH MORTAR. - The 2d Chemical Mortar Battalion using the new 4.2-inch mortar M30 with the M2 and M3 shell had three malfunctions, one in each company, and all within two successive days. Investigation disclosed that the malfunction occurred on the first round fired from the new barrel. The round would slide sluggishly down the barrel, a dull explosion would occur, and the round would travel slowly out of the barrel trailing dense smoke clouds and unburned propelling increments. Subsequent firing from the same mortar using the same lot of ammunition functioned normally.

It was found that a transparent hardened preservative which coated the interior of the barrel was responsible for the sluggish drop of the projectile. The initial explosion of the propellant would burn out this substance, clear the barrel, and permit subsequent normal firing.

SOURCE: Command Report - 378 Engr Combat Bn

DATE: October 1952 Source No 698

(RESTRICTED)

COMMENTS ON AUSTIN-WESTERN GRADER, MODEL 99H. - RECOMMEND: That the Austin-Western Grader, Model 99H, be made available to units working on road maintenance and road construction through mountainous terrain. Roads built through mountainous terrain naturally have many sharp turns and switchbacks. The Austin-Western Grader with its 4-wheel hydraulic steering system easily negotiates these turns. This grader has all the qualities of other standard military graders, plus maneuverability.

That the anchor lug on the circle and draw bar of an Austin-Western Grader, Model 99H, be redesigned since this lug shears off after a short period of operation. It is necessary to weld this lug in place as a field expedient; however, this is only a temporary measure, and this complete fitting should be redesigned giving it more strength to cope with the stress and strain placed upon the grader.

That the piston rod which is part of the "Scarifier Ram" on an Austin-Western Grader, Model 99H, be redesigned since experience indicates unusual failure of the rod at the point where the rod tapers into the collar. As a field expedient, a weld is built around the rod and collar joint; however, this is only of temporary value and requires repeated welding.

(RESTRICTED)

ENGINEER RECONNAISSANCE TRAINING. - The training of reconnaissance personnel should be extended to include surveying and locating roads through mountainous terrain to include practical problems. A well-trained experienced reconnaissance party will take advantage of all favorable soil, ground and terrain features and save many days of construction effort.

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SOURCE: Command Report - I US Corps

DATE: July 1952 Source No 699

(RESTRICTED)

DEBRIS BOOMS TO PROTECT BRIDGES. - All debris booms constructed of cable up to 1-1/2 inches in diameter snapped under the load imposed by the force of current and the impact of debris. Their use proved a complete failure.

SOURCE: Command Report - 13th Engr Combat Bn

DATE: October 1952 Source No 700

(RESTRICTED)

WATER POINT OPERATION AND DEFICIENT WATER TANKS. - Operation of water points is hampered by lack of serviceable tanks. The rubber tank has proven very unsatisfactory in the 7th Infantry Division. The stress around the drain plug is too great and the tank tends to split-out where the opening occurs. Sufficient reinforcing as found in the canvas tank will alleviate this deficiency. During the past four months, sixteen rubber tanks were placed in service and fifteen rubber tanks were salvaged. During this same period seven canvas tanks were placed in service and none were salvaged. Under current operating conditions rubber tanks will remain serviceable approximately six months under combat conditions. Recommend that proper supply agencies be informed of the above and an attempt made to ship canvas tanks in lieu of rubber tanks until the above defect is corrected.

For winterization of water points a field expedient was considered whereby tents for storage tanks were equipped with fuel-burning tent stoves. Objection to this method is that the defect in rubber tanks mentioned above will result in flooded tents and further damage to equipment by freeze caused by the loss of heat during the flooded condition within the tent.

SOURCE: Command Report - 3d Div Arty

DATE: October 1952 Source No 701

(RESTRICTED)

ARTILLERY SUPPLY SHORTAGES. - Officers and men are spending their own money on target grids, fans, plotting needles, rubber cement and scotch tape. Recommend that regular supply channels provide these items in sufficient quantity.

SOURCE: Command Report - 5th RCT

DATE: October 1952 Source No 702

(RESTRICTED)

ARMORED VESTS. - Front line units continued to utilize armored vests which increased in number to 1,591. In many instances, vests deflected hand grenade and shell fragments and, on occasion, stopped enemy submachine gun bullets when fired from long ranges.

SOURCE: Command Report - 7th Div Arty

DATE: October 1952 Source No 703

(RESTRICTED)

ADVANCE OF INFANTRY WHEN ASSAULT FIRES ARE LIFTED. Preparations must be so planned that attacking troops are in position to make the final assault when fires are lifted. In the morning, prior to an attack, medium batteries and corps 8-inch howitzers were adjusted so as to cover the objective area. When a preparation was fired during the afternoon, it was continued until the infantry approached the area where it was endangered by our own fire. The heavy artillery was lifted and the medium concentrations were then moved forward by one or two hundred yard bounds as the infantry advanced. The operation was so successful that the objective was taken at a cost of only six wounded.

SOURCE: Command Report - IX Corps, Armored Sec

DATE: August 1952 Source No 704

(CONFIDENTIAL)

ENEMY ANTITANK DEFENSE TACTICS. - On 10 July, Company D, 1st Tank Battalion, 1st Marine Division (Reinf), made a tank raid on enemy installations in the vicinity of * * *. During this raid heavy enemy AT fire was received. The following types of weapons were used by the enemy against the tanks: rifle grenades, bazookas, 87-mm spin stabilized rockets, 75-mm recoilless rifles, 76-mm field guns, mortars and heavy artillery.

The enemy employed his AT defense in depth and in most instances deployed AT weapons in pairs. The enemy placed his bazookas and 87-mm rocket launchers to cover armored avenues of approach by flanking shots at short ranges, and his recoilless rifles and 76-mm AT guns to cover the long axis of corridors leading into his positions. In this manner, the enemy made excellent use of the effective ranges of his weapons. Bazookas opened fire only when tanks were within four hundred yards, whereas the 87-mm rocket was used at ranges up to seven hundred yards. The 76-mm recoilless rifle was used at twelve hundred yards range and the 76-mm AT guns opened fire at two thousand yards range. The enemy used his AT weapons against the tanks only when they were stopped and then the lighter weapons were moved rapidly from one position to another.

The enemy's AT fire was heavy, but only two direct hits were inflicted. One tank was hit on the muffler by a rifle grenade and only minor damage was sustained. There was very little shrapnel and operation of the tank was in no way hindered by the explosion. Another tank received a direct hit on the turret by an enemy 87-mm spin stabilized rocket. The trajectory of the rocket seemed a bit wobbly as revealed by the smoke trail that followed. The rocket was fired at a range of approximately four hundred yards and penetrated only about two inches. The diameter of the hole was about one inch. Again, the force of the explosion in no way hindered the operation of the tank.

IX Corps G2 Comment:

Enemy antitank defenses across the IX Corps sector have in the past appeared to be less well coordinated and effective than the ones described above. Only on one occasion during recent months was the enemy successful

in inflicting major damage and successfully defending against a UN tank foray. Increasing evidence of improving enemy antitank defenses are, however, being received constantly. Antitank ditches and traps are being expanded, obstacles in connection with the latter continue to be erected and antitank guns are reported sighted along most favorable routes of armored approach. Aerial sightings, PW and agent reports confirm the above and indicate presence of mine fields in these same areas. The enemy appears to be making increasing use of existing defensive terrain for his anti-mechanized defenses, and his selection of main armored routes of advance appears to coincide with current UN terrain studies of the area in the IX Corps sector.

SOURCE: Command Report - I Corps

DATE: August 1952 Source No 705

(RESTRICTED)

MODIFICATION OF M46 TANK OIL COOLER ASSEMBLY. - Ordnance has built a redesigned oil cooler assembly as a possible improvement and replacement for the present oil cooler assembly. The main modification is the substitution of the mechanical clutch from the engine fan tower for the magnetic clutch in the oil cooler assembly. In the past the magnetic clutch failed frequently. Four of the mechanical clutches have been mounted in oil cooler assemblies. Two were mounted in assemblies as received from the ZI and two were mounted in rebuilt assemblies.

(RESTRICTED)

ASPHYXIATION OF TANK CREWMEN. - While firing the main armament when buttoned up in the M46 tank on different occasions, men of the turret crew have passed out. The ventilating blower mounted between the driver and assistant driver was on at all times. This only kept the air between the driver and assistant driver clear. A check was made of 3d Division regimental tank companies and the 64th Tank Battalion. It was found on two occasions while firing when buttoned up in the tank with ventilating blower, on, that men of the 65th Infantry Tank Company were asphyxiated. The 7th Infantry Tank Company fired 100 rounds of 90-mm in support of a patrol. Although hatches were open, it was necessary to change the turret crew as the fumes made them sick. The 15th Infantry Tank Company on one occasion while firing the main armament when buttoned up, found it necessary to open

the hatches after 10 rounds had been fired as the crew became sick from the fumes. During this firing the ventilating blower was on but again only the air between the driver and assistant driver was clear.

Recommend:

1. Relocating the present ventilating blower, mounted between the driver and assistant driver, to the top of the turret compartment of the M46 tank, or

2. Mounting a ventilating blower in the turret of the M46 tank in addition to the present ventilating blower mounted between the driver and the assistant driver.